PATENT APPLICATION Docket No.: 15436.299

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:		)
11	Lucy Hosking	ĺ
Serial No.:	10/784,565	)
Filing Date:	February 23, 2004	) Art Unit ) 2828
Confirmation No.:	8644	)
Title:	SYSTEM AND METHOD FOR CONTROL OF OPTICAL TRANSMITTER	) ) )
Examiner:	Armando Rodriguez	)
Customer No.:	022913	) )

## RESPONSE TO ELECTION OF SPECIES REQUIREMENT

MAIL STOP: AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicant submits this paper in response to the Office Action mailed October 10, 2006 (the "Office Action"). In the Office Action, the Examiner set forth an Election of Species Requirement that identified what the Examiner has characterized as four (4) patentably distinct species of the claimed invention. In particular, the Examiner suggested in the Office Action that the present application contains claims directed to the following species:

Species I: Claims 1, 2, 4, 6, and 8 pertains to implementing the control of the bias and modulation at different times and claims 6, 8 and 7, 9 mutually exclude each other;

Species II: Claims 1, 3, 7, and 9 pertains to implementing the control of the bias and modulation at same time;

Species III: Claims 1, 5, 7, and 9 pertains to implementing the control of the bias and modulation at different times; and

Species IV: Claims 15-22, pertains to controlling the bias and modulation at first and second time slots.

The Examiner has indicated that claim 1 is generic to all of the aforementioned species.

In response to the Election of Species Requirement set forth in the Office Action, Applicant hereby elects Species I (claims 1, 2, 4, 6 and 8) for examination, *with traverse*. With regard to such traversal, Applicant notes that the election of species requirement set forth by the Examiner in the Office Action is problematic for a variety of reasons.

Applicant notes, first, that notwithstanding that the Examiner has identified species I and III as "mutually exclusive," the Examiner has nonetheless characterized both species I (claims 1, 2, 4, 6 and 8) and III (claims 1, 5, 7 and 9) as pertaining to the same notion, namely, "implementing the control of the bias and modulation at different times." This characterization would thus seem to contradict the judgment of the Examiner that claims 1, 2, 4, 6 and 8 should be assigned to one species (namely, Species II), while claims 1, 5, 7 and 9 should be assigned to another species (namely, species III).

In addition, Applicant notes that the Examiner has characterized each of claims 7 and 9 in two different fashions. Particularly, the Examiner has asserted on the one hand that "Species II, claims ... 7, 9, pertains to implementing the control of the bias and modulation at the <u>same</u> time." *Office Action at 2. Emphasis added*. On the other hand, however, the Examiner has also asserted that "Species III, claims ... 7, 9, pertains to

implementing the control of the bias and modulation at <u>different</u> times." *Office Action at 2. Emphasis added.* 

Further, Applicant respectfully submits that the Examiner has erred in suggesting that claims 6, 7, 8 and 9 pertain to "implementing the control of the bias and modulation at different times." In fact, <u>none</u> of claims 6-9, each of which depends directly from generic claim 1, makes any reference to the <u>relative times</u> at which either a laser bias control scheme or electrical modulation amplitude control scheme is implemented. Rather, claims 6-9 refer to the manner, i.e., linearly or non-linearly with respect to time, in which either a laser bias control scheme or electrical modulation amplitude control scheme is implemented.

Finally, the allegation of the Examiner that claims 6 and 8 are mutually exclusive of claims 7 and 9, respectively, is not well founded. For example, claim 6 recites in part that "... at least a portion of the change to the laser bias is implemented linearly with respect to time..." (emphasis added) while claim 7 recites in part that "... at least a portion of the change to the laser bias is implemented non-linearly with respect to time..." (emphasis added). Thus, claim 6 embraces, among others, a situation where another portion of the laser bias may be implemented in other than a linear fashion. Similarly, claim 7 embraces, among others, a situation where another portion of the laser bias may be implemented in other than a non-linear fashion. The specification is consistent.

For example, the specification states in part that "...it may be desirable in some instances to provide for transmitter enable and/or disable processes where only a portion of the desired change in signal modulation and/or laser bias proceeds according to a ramp function. The remainder of the change in signal modulation and/or power input could then be defined and implemented in any other suitable way." Paragraph 0085. Emphasis added. The specification further provides that "...yet other control functions may be defined and implemented that comprise hybrid arrangements where a portion of the change in the data signal electrical modulation amplitude and/or optical transmitter

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laser bias is implemented according to one type of function, while another portion of the

change in signal modulation and/or optical transmitter laser bias is implemented

according to another type of function." Paragraph 0086. Emphasis added.

For at least the foregoing reasons, Applicant respectfully submits that the election

of species requirement set forth by the Examiner in the Office Action is not well-taken.

Accordingly, Applicant respectfully requests that the Examiner reconsider such election

of species requirement and make whatever changes may be necessary.

In connection with the election set forth above, Applicant notes that such election

is made without prejudice. As noted by the Examiner, upon the allowance of a generic

claim, Applicants will be entitled to consideration of claims to additional species that are

written in dependent form or otherwise include all the limitations of an allowed generic

claim as provided by 37 C.F.R. § 1.141.

An action on the merits of claims 1, 2, 4, 6 and 8 and a Notice of Allowance

thereof are respectfully requested. In the event that the Examiner wishes to discuss any

of the matters contemplated hereby, the Examiner is invited to initiate a telephone

conversation with the undersigned.

Dated this 8th day of November, 2006.

Respectfully submitted,

/Peter F. Malen, Jr./

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